10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Kappa light chain Antibody

Rabbit mAb
Catalog # AP91181

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	P01834
Reactivity	Human
Clonality	Monoclonal
Other Names	HCAK1; Ig kappa chain C region; IGKCD; Immunoglobulin InV;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	11765

Additional Information

Dilution	WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:100~1:500 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Kappa light chain
Description	The five types of immunoglobulin heavy chains are known as: IgG, IgA, IgM, IgD, and IgE. IgG is divided into four subclasses, and IgA is divided into two subclasses. In serum IgA and IgG are monomers with a single 4 polypeptide unit; while, IgM is a pen tamer. IgA may also form polymers. Kappa light chain antibody can be used for the identification of leukemias, plasmacytomas and certain non Hodgkin's lymphomas.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

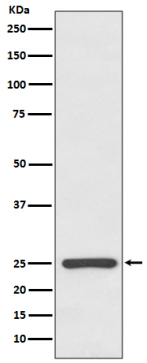
Protein Information

Name	IGKC {ECO:0000303|PubMed:11549845, ECO:0000303|Ref.13}
Function	Constant region of immunoglobulin light chains. Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins- secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which results in the elimination of bound antigens (PubMed:20176268, PubMed:22158414). The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic

hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed:17576170, PubMed:20176268).

Cellular Location Secreted. Cell membrane

Images



Western blot analysis of Kappa light chain expression in human plasma lysate.